

## **HUD Offers New Green Operations and Maintenance Resource**

There is a new resource available to PHAs looking to explore how to "go green" in their business and maintenance operations, *Green Building Operations & Maintenance Manual: A Guide to Public Housing Authorities.* Developed through public/private partnerships, the free manual provides housing agencies and other building owners with information for more sustainable operating facilities. It also offers a comprehensive resource for reducing energy, water, and toxic chemicals.

The manual project was funded through an American Recovery and Reinvestment Act of 2009 grant. Nine PHAs committed to implement specific programs to create energy-efficient, green communities. Green Seal, a green-focused nonprofit and Siemens, a private technology company, collaborated to develop the user-friendly manual and customize it for three climate regions within the United States: northern, southeast, and southwest.

"For the first time public housing authorities and building owners have access to a peer-developed source that provides practical, actionable guidance in an easy-to-use format that transcends the 'how' and reveals 'why' these recommended actions are important for the longevity of the housing developments they manage." said Mike Kearney, Senior Director for Siemens Industry, Inc., Building Technologies Division.

The manual covers a broad range of facility maintenance and management best practices, including HVAC systems, plumbing fixtures, lighting, landscaping, and recycling. It also offers information on ways for building owners and operators to with engage residents on community sustainability. The recommendations in the manual will lead to a decrease in toxic and other unhealthy substances in PHAs to the health benefit of the residents and PHA employees.

"The Green Building Operations and Maintenance Manual is unique in that no other green operations resource focuses on multi-unit housing or provides such comprehensive, detailed guidance for free," said Dr. Arthur B. Weissman, President and CEO of Green Seal. "The guidance is more than academic; these are practices facilities managers can start implementing today to take a significant step toward a sustainable society."

To download a copy of the manual for your geographic region, visit: <a href="http://www.greenseal.org/GreenBuildingOM.aspx">http://www.greeningpublichousing.com</a>. <a href="http://www.greeningpublichousing.com">http://www.greeningpublichousing.com</a>.

### **Helping PHAs Help People**

HUD has launched the Public and Indian Housing One-Stop Tool (POST) for PHAs, a website that enables PHAs to quickly access PIH systems, tools, program requirements, and much more. The POST homepage organizes information into eight categories that PHAs have indicated are the resources they most often search for on the HUD website. Another exciting feature is the PIH A-Z Index, an exhaustive alphabetical list of information relevant to PHA programs. Additionally, HUD has several new features under development that will make useful web content even more accessible, including a Calendar of Due Dates for PHAs and a list of PIH Forms. To learn more click here.

- >>> HUD Offers New Green
  Operations and Maintenance
  Resource
- >> Helping PHAs Help People
- We Green Conference
  Presentations are now
  Available
- Saving Energy and Resources: Structured Insulated Panels (SIPs) are Green Building Materials
- >>> Resident's Corner | Resident Training: Green and Healthy Living

**Green Conference Presentations are Now Available!** 

PowerPoint presentations from the Going Green: Intelligent Investments for Public Housing conference held earlier this year can be viewed here.

### Saving Energy and Resources: Structured Insulated Panels (SIPs) are Green Building Materials

A home or building built using Structured Insulated Panels (SIPs) construction can have dramatically reduced heating and cooling costs. SIPs allow for energy savings in the completed building in addition to using less energy and raw materials while producing the SIP. Air leakage is the enemy of heating and cooling costs and up to 40% of a home's heat loss is due to air leakage. The Oak Ridge National Laboratory has shown, through using a blower door test, that a building built using SIPs is 15 times more airtight than a stick-built home with fiberglass insulation.

The panels are made of an insulating foam core (expanded polystyrene (EPS)) sandwiched between two structural plates, typically oriented strand board (OSB). SIPs are manufactured under factory controlled conditions and can be built to the specifications of the building design. The result is a building system that is extremely strong, energy efficient and cost effective. The construction costs of a SIP home and a stick-built home are generally the same but the SIP home can have considerable future energy cost savings. Chris Schwind, a spokesman for the Structural Insulated Panel Association (SIPA) in Gig Harbor, Washington says, "You have to look at the environmental impact of a product over its entire life span with SIPs offering superior energy efficiency over at least 30 years."

Not only are the homes built with SIPs are energy efficient, the process for manufacturing the SIPs incorporates green practices. The OSB used as structural facing consumes 85-90 percent of the log by utilizing small wood chips and automated machinery. The remainder of the log – bark, saw trim and sawdust – can be converted into energy, pulp chips or bark dust. The EPS is composed mostly of air and contains only two percent plastic and any scrap EPS can be recycled into various other EPS products. Finally, the adhesive used to bond the OSB to the EPS does not contain any Volatile Organic Compounds (VOCs) which can decrease indoor air quality and may cause adverse health effects.

In addition to the construction benefits, SIPs can also drive economic growth in the community. The Housing Division of the Muscogee (Creek) Nation in Oklahoma operates a SIP manufacturing plant. The Housing Division was looking for an economical and efficient way to build affordable housing for their housing program participants. 24 affordable elderly housing units are currently being built using SIPs and are being funded through an American Recovery and Reinvestment Act grant. To build the greenest homes possible, the SIP built homes will be paired with geothermal heating and cooling units, high efficiency windows and tankless water heaters to maximize the energy savings. The plant currently employees six people and can produce enough SIPs to build approximately 30 homes a year.

Structured Insulated Panels can be an integral component to any green initiative and can lead to significant energy cost savings.

# Resident's Corner | Resident Training: Green and Healthy Living



Public Housing residents play an important role in the Public Housing agency's (PHA) goal of green and healthy affordable housing. Enterprise Green Communities has developed the "Green and Healthy Living: Resident Engagement Training in a Box." Enterprise Green Communities has partnered with many private and public agencies since 2004 to meet the goal of bringing the health, economic and environmental benefits of green building to low-income communities nationwide.

The training is a set of tools available to residents, resident councils, and PHAs that has been designed to increase residents' knowledge of green and healthy living. The training material is divided into four lessons: Energy Conservation, Water Conservation, Healthy Living, and Waste Reduction and Recycling. The energy conservation lesson focuses on how homes use electricity and how to minimize energy consumption. Water use habits and how to change those habits are reviewed in the water conservation lesson. The healthy living lesson discusses how to read household cleaner labels and pest control products in addition to how they affect your health. The final lesson explains how to maximize the environmental benefits of recycling.

"This project was a nice match to LINC's overall mission of being sustainable, to be able to provide our residents with useful information and simple strategies that enhance their lives while protecting the environment," said Maria Elena Marquez-Brookes, Director of Resident Services of LINC Housing in Long Beach, California.

If you are interested in bringing the "Green and Healthy Living: Resident Engagement Training in a Box" to your development, contact your resident council or PHA's Resident Services Coordinator. The training material is available through the Enterprise web site at: <a href="http://bit.ly/rVQhup">http://bit.ly/rVQhup</a>

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